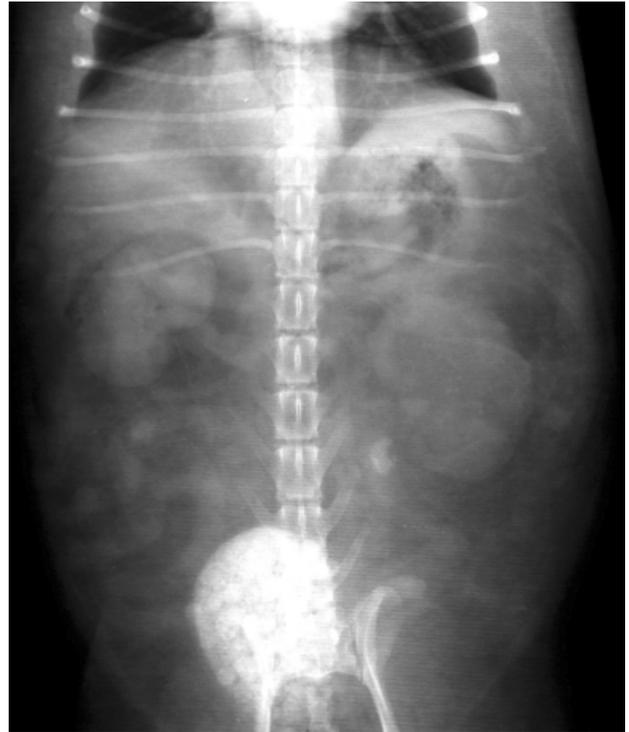


## WHAT IS YOUR DIAGNOSIS

Pranee Tuntivanich\* Suwicha Chuthatep\*



**Figure 1** Ventrodorsal radiograph of the abdomen



**Figure 3** Ventrodorsal radiograph, 5 minutes after intravenous contrast medium injection for excretory urography



**Figure 2** Lateral radiograph of the abdomen

### History :

An 8 year-old female Shih Tzu was presented with clinical signs of anorexia, high fever and severe vomiting for the previous two days. The dog had also showed intermittent stranguria and haematuria for 2 weeks. Numerous packed stones were found in the urinary bladder and abdominal palpation was painful. Marked leukocytosis, an increased BUN and serum creatinine were found after haematological examination.

Abdominal radiography, in ventrodorsal and right lateral views, and excretory urography were studied.

Give your diagnosis and turn to the next page.

### **Radiographic Diagnosis**

Radiopaque ureteral and cystic calculi

Enlargement of the left kidney with the contrast medium not passing through

### **Radiographic Findings and Comments**

The ventrodorsal and lateral radiographs of the abdomen (Fig.1,2) revealed radiopaque calculi in the left ureter and urinary bladder. Enlargement of the left kidney (more than 4 times the length of the L2 vertebral body) can be seen in the ventrodorsal view (The normal length of a dog's kidney is 2.5- 3.5 times the length of L2).

A ventrodorsal radiograph, 5 minutes after intravenous contrast medium injection (Fig.3) revealed ureteral obstruction and enlargement of the left kidney with showing only a nephrogram phase without any pyelogram phase. The size of the right kidney was within normal limits and functioned normally. Excretory urography is quite useful for defining anatomic structures and assessing qualitative function of the kidneys. This diagnostic method allows its use in both azotemic and nonazotemic patients that has been provided with adequate hydration. Nonionic contrast media such as iohexol (880 mgI per kilogram), causes less risk of systemic reactions than an ionic contrast media.